SPECTRUM®

ATX Switch
Management Module Guide

CABLETRON SYSTEMS

The Complete Networking Solution™

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Contents

Preface

What Is in This Guide ix
Conventions x
Related SPECTRUM Documentation x
Other Related Documentation xi
Getting Help xii

Chapter 1 Introduction

What Is in This Chapter 1-1
ATX LAN Switch Management Modules 1-1
ATX Switch Management Module Application 1-2
SPMA and the ATX Switch 1-3

Chapter 2 Device Views

What Is in This Chapter 2-1
Accessing the Logical or Interface Device Views 2-2
- Logical Interface Icons 2-4
  - Interface Number Label/Device Topology View 2-5
  - Administrative Status Label/IF Status View 2-5
  - Interface Type Label/IF Configuration View 2-5
  - Physical Address Label/IF Address Translation Table 2-6
  - IP Address Label/Network Information Panel 2-6
  - Logical Gauge Label/Performance View 2-7
- Interface Detail View 2-7
- Interface Options Panel 2-8
  - Gauge Control Panel 2-8
  - Logical Gauge Buttons 2-11

Chapter 3 Configuration Views

What Is in This Chapter 3-1
Accessing the Device Configuration View 3-1
Device Configuration View 3-2
Interface Configuration Table 3-3
Interface Configuration View 3-4

Chapter 4 Event and Alarm Messages

What Is in This Chapter 4-1
ATX Switch Events and Alarms 4-1

Index

Figures

Chapter 1 Introduction

Figure 1-1. Application View 1-3

Chapter 2 Device Views

Figure 2-1. ATX Switch Interface Device View 2-3
Figure 2-2. Logical Interface Icon Click Zones 2-4
Figure 2-3. Gauge Control Panel 2-9

Tables

Chapter 2 Device Views

Table 2-1. Interface Status Label Definitions 2-5
Table 2-2. Packet Breakdown Pie Chart 2-7
Table 2-3. Packet Breakdown Pie Chart 2-7
Table 2-4. Discard Breakdown Pie Chart 2-8
Table 2-5. Totals Gauge Mode Attribute and Color Definitions 2-10
Table 2-6. Rate Gauge Mode Attributes and Color Definitions 2-10

Chapter 3 Configuration Views

Table 3-1. ATX Switch Interface Types 3-3

Chapter 4 Event and Alarm Messages

Table 4-1. ATX Switch Events and Alarms 4-1

Preface

Use this guide if you are going to manage the ATX Switch through SPECTRUM. Before reading this guide, you should be familiar with SPECTRUM's functions. You should also be familiar with any network management and hardware requirements described in the related hardware documentation.

What Is in This Guide

The following chapter descriptions outline the organization of the ***ATX Switch Management Module Guide***.

Chapter	Description
Chapter 1 **Introduction**	Describes the ATX Switch management modules and model types.
Chapter 2 **Device Views**	Describes the Logical and Interface Device views and each view's representations of the ATX Switch.
Chapter 3 **Configuration Views**	Describes the configuration views for the ATX Switch and the device-specific management information provided by each view.
Chapter 4 **Event and Alarm Messages**	Contains a listing and explanation of the alarm and event messages generated in the Event Log or Alarm Manager for the ATX Switch.
Chapter 5 **Application View**	Describes the Application view for the ATX Switch and any application information provided by the view.

Conventions

This guide uses the following conventions:

- Menu selections and buttons referenced in text are printed in **bold**; for example, **Configuration** or **Detail**.
- Buttons are represented by a shadowed box; for example,

Help

- Menu navigation is displayed in order of selection; for example, **Icon Subviews -> Utilities -> Application**.
- Chapter titles appear in *italics*.
- Referenced documents appear in ***bold italics***.

Related SPECTRUM Documentation

Refer to the following documentation for more information on using SPECTRUM:

SPECTRUM Report Generator User's Guide

Getting Started with SPECTRUM for Operators

Getting Started with SPECTRUM for Administators

How to Manage Your Network with SPECTRUM

Other Related Documentation

Refer to the following documentation for more information on managing TCP/IP-based networks:

LAN Troubleshooting Handbook, Mark Miller (1989, M&T Publishing, Inc.)

The Simple Book — An Introduction to Management of TCP/IP-based Internets, Marshall T. Rose, Performance Systems International, Inc.

Computer Networks, Andrew S. Tanenbaum, Prentice-Hall, Inc.

Local Area Networks, Architectures and Implementations, James Martin & Kathleen K. Chapman for the Arben Group, Inc. (1989, Prentice-Hall, Inc.)

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Chapter 1

Introduction

What Is in This Chapter

This chapter describes the SPECTRUM Management Module for the ATX Advanced Technology Backbone LAN Switch. It also provides the model type name assigned to the ATX Advanced Technology Backbone LAN Switch in SPECTRUM.

ATX LAN Switch Management Modules

The ATX Advanced Technology Backbone LAN Switch (herein referred to as the ATX Switch) offers full multiprotocol support for Ethernet, Token Ring, FDDI and Fast Ethernet. Local routing for major protocols is supported. Translational switching capabilities exist at the (bridging) link layer and (routing) network layer between Ethernet and Token Ring. This allows switching between network technologies for non-routable protocols. The switching layers can be mixed and matched on a port-by-port basis. Additionally, ATX offers a redundant load-sharing power supply, hot-swappable modules, and a dual RISC-based Packet Processing Engine for full wire speed performance.

The ATX Switch Management Module includes a software emulation of the actual device attributes and functionality. The ***ATX Switch Management Module Guide*** provides all the information necessary to manage the ATX Switch using SPECTRUM.

The ATX Switch Management Module supports one model type, CSI_ATX, used to represent the physical ATX Switch, the supported applications, and the interfaces. The following chapters provide a description of the model and relationship to the views in SPECTRUM.

ATX Switch Management Module Application

SPECTRUM management of the ATX Switch is based on common and device-specific applications. The following common applications and sub-applications are discussed in the ***Bridging Applications, MIB-II Applications, Miscellaneous Applications***:

- IP Routing (IP2RtrApp)
- Bridging
  - Gen Bridge (Gen_Bridge_App)
  - Spanning Tree (Span_Tree_App)
  - Static (Static_App)
  - Transparent (Transparent_App)
- Ethernet App (EthernetApp)
- MIB-II (SNMP2_Agent)
  - System (System2_App)
  - ICMP (ICMP_App)
  - TCP (TCP2_App)
  - UDP (UDP2_App)

RMON and DLM are also supported and SPECTRUM management modules for these MIBs may be purchased separately. Refer to the documentation provided with the RMON and DLM management modules for descriptions of these capabilities.

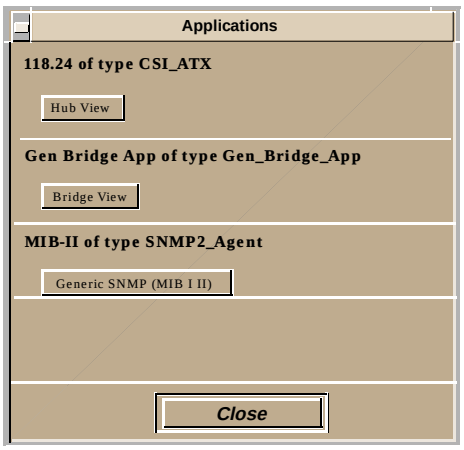
SPMA and the ATX Switch

SPECTRUM also supports SPECTRUM Portable Management Application (SPMA) functionality for the ATX Switch. To open the SPMA Application view from any SPECTRUM view, do the following:

1. Highlight the Device icon.
2. From the View menu, select **Icon Subviews -> Utilities -> Application**.

The Application view provides buttons to select SPMA-specific views and dialog boxes. Figure 1-1 shows an example of an SPMA Application view.

Figure 1-1. Application View



For details on the following SPMA views, refer to the ***SPECTRUM Portable Management Application for the ATX User's Guide***.

Bridge View

Chapter 9, *Using the ATX Bridge View*, provides detailed instructions for configuring and managing the bridging capabilities available for many client modules. Bridge capabilities include monitoring Bridge operation, using the special and filtering databases, and setting forwarding thresholds and notification options.

For details on the following SPMA views refer to the ***SPECTRUM Portable Management Application Tools Guide***.

Generic SNMP (MIB I II)

Chapter 2, *Using the MIB I, MIB II Tool*, explains how to use this tool to view and change MIB I and MIB II object ID values.

Community Names

Chapter 3, *Using the SPMA Community Names Tool*, explains Cabletron's "Component" structure of device MIBs, and describes how to change device community names.

Chapter 2

Device Views

What Is in This Chapter

This chapter describes the Device views available for the ATX Switch Management Module and includes representations of the modules, ports, and interfaces. It also describes any subviews available. The Device views accessible from the Icon Subviews menu are as follows:

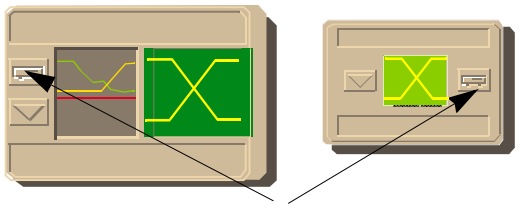
- Logical Device view
- Interface Device view

The Logical Device view allows you to access the ATX Switch's SPECTRUM Portable Management applications and the logical representations of the ATX Switch's interfaces. The Interface Device view allows you to access the views that monitor and control the interfaces. The sections on the following pages provide information on accessing the ATX Switch Device views.

Accessing the Logical or Interface Device Views

The Device view is accessed using one of the following methods:

- Double-click on the Device view button of the ATX Switch module icon. This opens the Device view that was opened last (i.e. Logical or Interface).



- Highlight the ATX Switch device icon and select **Device -> Logical** or **Interface** from the Icon Subviews menu. This opens the SPECTRUM Portable Management Application (SPMA) Hub view, which is described in the ***SPECTRUM Portable Management Application for the ATX User's Guide***.

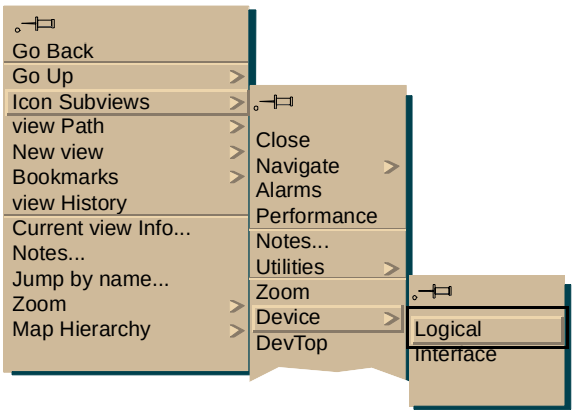
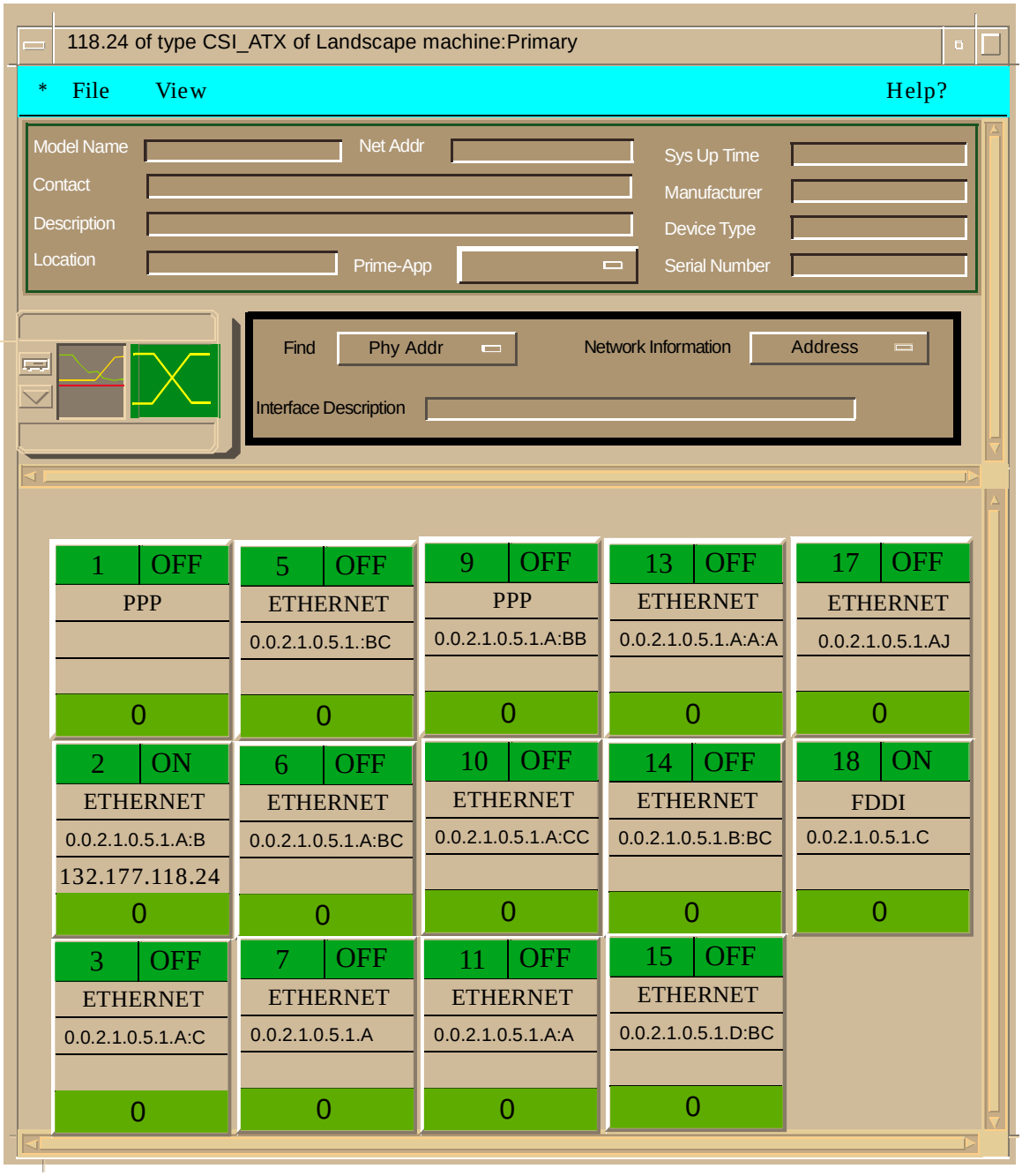


Figure 2-1 shows an example of the ATX Switch Interface Device view.

Figure 2-1. ATX Switch Interface Device View

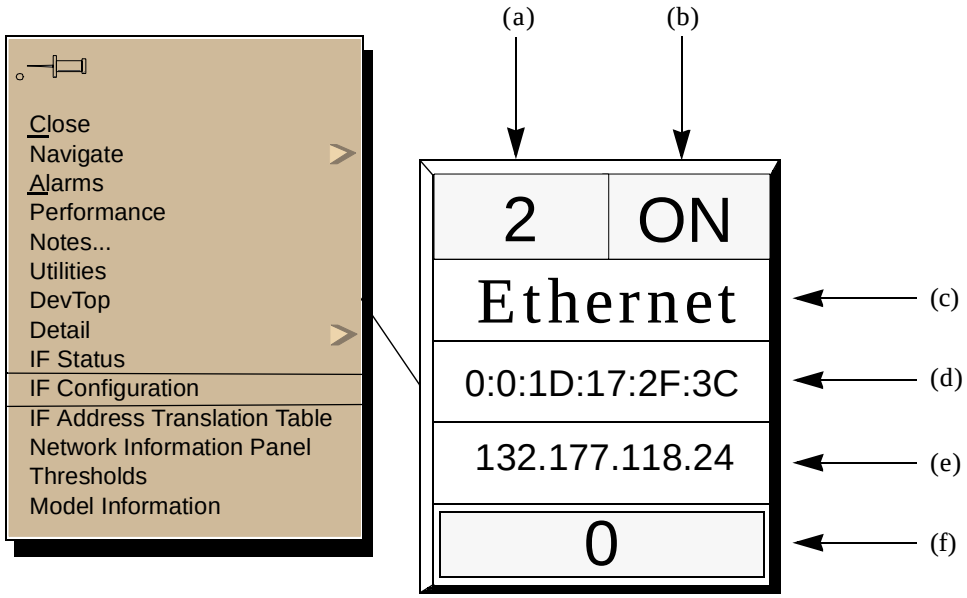


Logical Interface Icons

The ATX Switch Interface Device view displays a logical representation of the device's interfaces. A Logical Interface Icon represents each port on the ATX Switch device. Additional views for the interface can be accessed by single-clicking on the interface icon to highlight it and then selecting the **Icon Subviews** option from the **View** menu, or by double-clicking each icon zone. The Port Notes facility is also accessed from the **Icon Subviews** menu.

The Logical Interface Icon consists of six zones, providing configuration and performance information. Figure 2-2 provides a detailed illustration of the Logical Interface Icon and the following sections provide further information about each icon zone.

Figure 2-2. Logical Interface Icon Click Zones



a. Interface Number Label/Device Topology View

b. Administrative Status Label/IF Status View

c. Interface Type Label/IF Configuration View

d. MAC Address Label/IF Address Translation Table

e. IF Address Label/Network Information Panel

f. Logical Gauge Label/Interface Performance View

Interface Number Label/Device Topology View

Zone (a) of the Logical Interface Icon accesses the ATX Switch Device Topology view, discussed in ***SPECTRUM Views***. The zone also displays the interface number.

Administrative Status Label/IF Status View

Zone (b) of the Logical Interface Icon displays the IF Status label and an appropriate background color to represent the current status of the interface. Table 2-1 shows the possible interface statuses and their respective colors.

Table 2-1. Interface Status Label Definitions

Operational Status	Administrative Status	Text Display	Color
ON	ON	ON	Green
OFF	OFF	OFF	Blue
OFF	ON	OFF	Yellow
Testing	Testing	Test	Red

Double-clicking on this IF Status view label accesses the Interface Status view which provides the following information on the status of the interface:

Operational Status
A read-only indicator button displaying the current operational state of the interface (ON, OFF, or Testing).

Administrative Status
The desired operational state of the interface (Default, ON, OFF, or Testing). You may change the value for Administrative Status.

Interface Type Label/IF Configuration View

The IF Configuration view label (c) Logical Interface Icon displays the type of ATX Switch interface. Possible device interface types are shown in Chapter 3, *Configuration Views*. This view is also accessed by clicking the **Config** button in the Performance view (see label (f)). Double-clicking on the IF Configuration view label accesses the Interface Configuration view, which provides the following information for the interface below the banner:

Operation Status
This read-only field provides the current operational state of the interface (On, Off, or Testing).

Admin Status
You can select the desired operational state of the interface (On, Off, or Testing).

Last Change
The System UpTime value when the interface entered its current operational state. This is provided in the format: D + HH:MM:SS, for example, 1+20:40:25 if the ATX Switch has been active for one day and 20 hours, 40 minutes and 25 seconds.

Network Name/Address
The IP Address assigned to the ATX Switch.

Physical Address
The Ethernet (MAC) address of the interface.

Bandwidth
The estimated bandwidth of the interface measured in bits per second. For interfaces that do not vary in bandwidth, or when no accurate estimate can be made, a nominal bandwidth is provided.

Packet Size
The largest packet that can be transmitted or received by the port, measured in octets.

Queue Length
The length of the outbound packet queue, in packets.

Physical Address Label/IF Address Translation Table

Zone (d) of the Interface Icon displays the physical address of the device interface. Double-click this zone to access the Interface Address Translation Table. This table cross-references device IP addresses to device MAC (Ethernet) addresses for selected nodes between networks. Double-clicking on any column entry opens an address-specific Address Translation Table Information view.

IP Address Label/Network Information Panel

Zone (e) of the Logical Interface Icon accesses the Network Information Panel. This panel provides Name, Network Address, and subnet mask information for the interface for the ATX Switch device. Any of the network information entries from this panel or the device's IP address can be displayed on zone (e) of the Logical Interface Icon. Refer to the Interface Options Panel section of this chapter.

Logical Gauge Label/Performance View

Zone (f) of the Logical Interface Icon (see Figure 2-2) accesses the Performance view for the interface. The Performance view is a multi-line graph and provides routing information (traffic flow) in packets, as described below. This area is also a Logical Gauge which is described later in this chapter.

Multi-Attribute Line Graph

The Multi-Attribute Line Graph provides a general indication of routing activity. The attributes displayed are pre-selected and use colors to represent different statistics.

Interface Detail View

The Interface Detail view is accessed by clicking the **Detail** button in the Performance view. It provides three color-coded pie charts displaying packet breakdown information for the interface. Table 2-2, Table 2-3, and Table 2-4 list the information provided by these pie charts.

Each statistic is presented as a total amount since the interface was initialized and as a percentage of overall network traffic.

Table 2-2. Packet Breakdown Pie Chart

Statistic	Definition
Delivered	Packets delivered to a high level protocol.
Transmitted	Packets transmitted through this interface.
Errors	Packets containing errors preventing them from being delivered to a higher level protocol.
Discards	Packets discarded even though no errors were detected to make them undeliverable - such packets may have been discarded to increase buffer space.

Table 2-3. Packet Breakdown Pie Chart

Statistic	Definition
In Errors	Packets received containing errors.
Out Errors	Packets transmitted containing errors.

Table 2-4. Discard Breakdown Pie Chart

Statistic	Definition
Unknown	Locally addressed packets received successfully but discarded because of an unknown or unsupported protocol.
In No Resource	Received packets discarded even though no errors were encountered to prevent their continued processing - such packets may have been discarded to increase buffer space.
Out No Resource	Transmitted packets discarded even though no errors were encountered to prevent their continued processing - such packets may have been discarded to increase buffer space.

Interface Options Panel

The Interface Options Panel, displayed in the Interface Device view, is located directly below the Device view banner and displays the ATX Switch Location/ Topology view icon. The Interface Options Panel allows a user to modify the presentation of the Logical Interface Icon (described previously), and is described below.

Filter
The Filter area of the Interface Options Panel is only implemented if the SPECTRUM Routing Services Management Module is loaded. For more information, refer to the ***SPECTRUM Management Module Guide for Routing Services***.

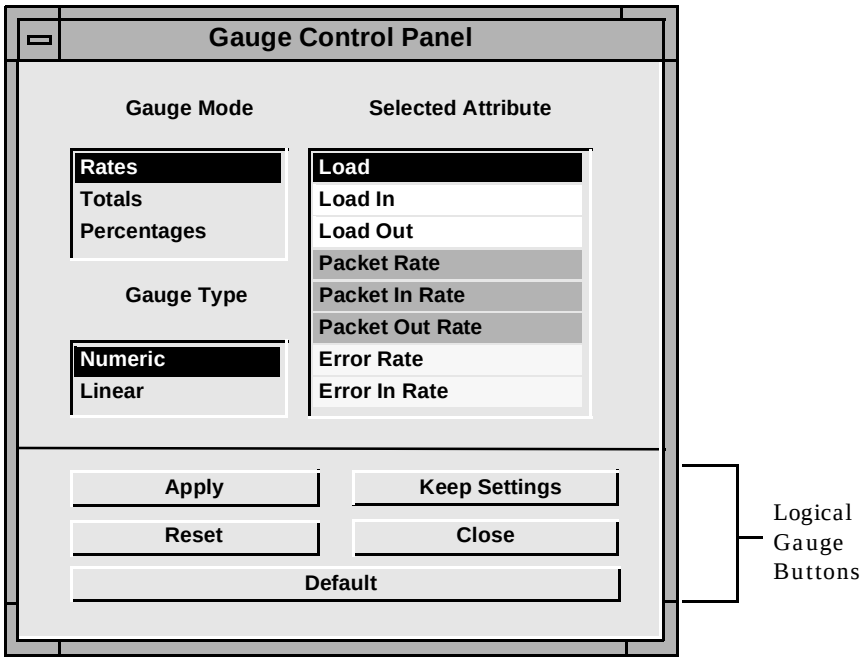
Network Information
The Network Information area of the Interface Options Panel allows you to select what interface information is displayed in the Network Information Label of that interface's Logical Interface Icon. Possible selections are ADDRESS, NAME, or MASK.

Interface Description
The Interface Description area of the Interface Options Panel displays a description of the selected interface. If no interface is selected, this field is empty.

Gauge Control Panel

The Gauge Control Panel (Figure 2-3) allows you to change the type of statistical information presented in the Logical Gauge area of the Logical Interface icon.

Figure 2-3. Gauge Control Panel



To access the Gauge Control Panel, double-click on the Interface Options Panel, or single-click on the panel to highlight it and then select **Gauge Control Panel** from the Icon Subviews menu. The Gauge Control Panel provides the following information:

- Selected Attribute
- Gauge Mode
- Gauge Type
- Logical Gauge Buttons

Selected Attribute
This area of the Gauge Control Panel allows you to select the statistical attribute displayed on the Logical Interface icon's gauge. The label changes color to reflect the attribute selected.

Gauge Mode
This area of the Gauge Control Panel allows you to select the mode presented by the Logical Gauge. Possible selections are Totals, Rates, or Percentages. The Percentages selection presents the percentage of the interface compared to the rest of the interfaces. Table 2-5 provides a list of attributes and color definitions for the Totals mode. Table 2-6 provides a list of attributes and color definitions for the Rates mode.

Table 2-5. Totals Gauge Mode Attribute and Color Definitions

Selected Attribute	Color
In Errors	Orange
Out Errors	Orange
In Packets	Blue
Out Packets	Blue
Unknown Protocols	Tan
In No Resource	Yellow
Out No Resource	Yellow
In Octets	Gray
Out Octets	Gray

Table 2-6. Rate Gauge Mode Attributes and Color Definitions

Selected Attribute	Color
Load	Green
Load In	Green
Load Out	Green
Packet Rate	Blue
Packet In Rate	Blue
Packet Out Rate	Blue
Error Rate	Orange
Error In Rate	Orange
Error Out Rate	Orange
Discard Rate	Yellow
Discard In Rate	Yellow
Discard Out Rate	Yellow

Gauge Type
The Gauge Type option allows you to select either a numeric or linear presentation of the Logical Gauge.

Logical Gauge Buttons

The following section describes the Logical Gauge buttons.

Apply

Applies the current settings to the Logical Gauge. It does not save the settings.

Keep Settings

Saves the current gauge settings while running SpectroGRAPH.

Reset

Resets the settings to the last saved values.

Close

Closes the Gauge Control Panel.

Default

Resets the settings to the SPECTRUM default.

Chapter 3

Configuration Views

What Is in This Chapter

This chapter provides a description of the Configuration views for the ATX Switch. These views allow you to access device and interface specific configuration information, as well as traffic flow and error rates. The following configuration views are available for the ATX Switch management module.

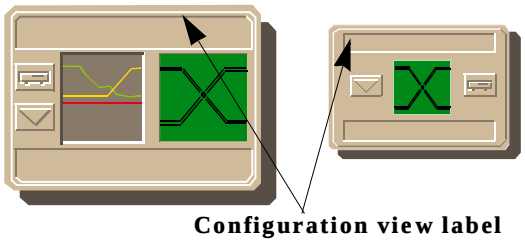
- Device Configuration
- Interface Configuration

The Interface Configuration view is a sub-view of the Device Configuration view.

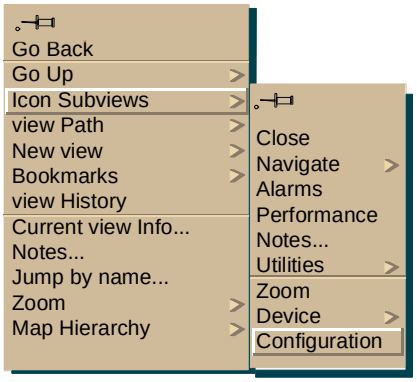
Accessing the Device Configuration View

You can access the Device Configuration view using one of the following methods:

- Double-click on the Configuration view label of the ATX Switch device icon.



- Highlight the device icon and select **Configuration** from the Icon Subviews menu.



Device Configuration View

The Device Configuration view for the ATX Switch provides detailed information on the ATX Switch's network, host, port, and model configuration. This view provides the following device configuration-specific information:

Device Name
The user-defined device name. This field is updateable.

Contact Status
The status of the ATX Switch. Possible values are Established, Lost, or Initial.

Number of Interfaces
The number of ports on the ATX Switch.

IF Address Translation

Allows you to the access Interface Address Translation Table; the fields are described below. This table can be updated.

Interface Index
A unique value for each interface. Its value ranges between 1 and the value of ifnumber. The value 0 for each interface must remain constant at least from one reinitialization of the entity's network management system to the next reinitialization.

Physical Address
The interface's address at the protocol layer immediately below IP in the protocol stack. The Ethernet address of the bridge is returned, for both channels of the bridge.

Network Address
The network address for the interface.

Reconfigure

This button allows you to reconfigure the device. When the reconfiguration is complete, the "Action Successful" dialog box appears.

Interface Configuration Table

The Interface Configuration Table provides port configuration information for each of the ATX Switch's ports. The Interface Configuration Table and its corresponding entry-specific views provide the following information:

Index
The port number on the ATX Switch.

Description
A textual description of the interface. This description may include the name of the manufacturer, the product name, and the version number of the hardware interface.

Type
The type of interface for the port. Possible interface types and a brief description of each type are listed in Table 3-1.

Table 3-1. ATX Switch Interface Types

Interface Type	Description
Other	None of the following
ETHERNET	Ethernet CSMA/CD
ISO88023	ISO CSMA/CD
ISO88024	ISO token bus
ISO88025	ISO token ring
FDDI	Fiber Distributed Data Interface

Table 3-1. ATX Switch Interface Types (Continued)

Interface Type	Description
PPP	Point to Point Protocol
SLIP	Generic Serial Line IP

Bandwidth
The estimated bandwidth of the interface measured in bits per second. For interfaces that do not vary in bandwidth or for which no accurate estimate can be made, a nominal bandwidth is provided.

Physical Address
The Ethernet (MAC) address of the port.

Operation Status
The current operational state of the port (On, Off, or Testing).

Admin Status
The desired operational state of the port (On, Off, or Testing).

Last Change
The System UpTime value when the port entered its current operational state.

Queue Length
The length of the outbound queue of packets.

Packet Size
The largest Maximum Transmission Unit (MTU) that can be transmitted or received by the port, measured in octets.

Double-clicking on any column entry for a particular port accesses the Interface Configuration view. This view is described below.

Interface Configuration View

You can access the IF Configuration view from the Interface icon in the Interface Device view. The IF Configuration view provides the following information:

Admin Status
The desired operational state of the port (On, Off, or Testing). You can change the Admin Status in this view.

Network Name/Address
Displays the network name and IP address for this ATX Switch.

Chapter 4

Event and Alarm Messages

What Is in This Chapter

This chapter describes the types of events and alarms generated by the ATX Switch.

ATX Switch Events and Alarms

Table 4-1 describes the event messages appearing in the Event Log, and any corresponding probable cause messages that may be displayed in the Enterprise Alarm Manager view for the ATX Switch.

Table 4-1. ATX Switch Events and Alarms

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event00010306 {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has been cold started. (event [{e}])	**No probable cause message.**
CsEvFormat/Event00010307 {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has been warm started. (event [{e}])	**No probable cause message.**

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event00010308 {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has detected a communication Link Down. (event [{e}])	**CsPCause/Prob00010308** Communication link is down.
CsEvFormat/Event00010309 {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has detected a communication Link Up. (event [{e}])	**No probable cause message.**
CsEvFormat/Event0001030a {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has detected an Authentication Failure. (event [{e}])	**CsPCause/Prob0001030a** Authorization failure. Other user is trying to connect to device with an invalid community string.
CsEvFormat/Event0001030b {d "%w- %d %m-, %Y - %T"} - A(n) {t} device, named {m}, has detected an EGP Neighbor Loss. EGP Neighbor IP address is {0 1}. (event [{e}])	**CsPCause/Prob0001030b** Lost contact with EGP neighbor.
CsEvFormat/Event00010402 {d "%w- %d %m-, %Y - %T"} - Device {m} of type {t} is created with a physical (MAC) address already used by another model. (event [{e}])	**CsPCause/Prob00010402** DUPLICATE PHYSICAL ADDRESS The model has the same Physical address (MAC address) as that of some other model.
CsEvFormat/Event019d0001 {d "%w- %d %m-, %Y - %T"} - Device {m}, {0 5}, reports a temperature change to {T SMC_temperature 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0001** The device could be hotter or it could have dropped in temperature.
CsEvFormat/Event019d0004 {d "%w- %d %m-, %Y - %T"} - For device, {m}, the number of received packets lost because of insufficient buffers is {I 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0004** Received packets lost. Insufficient buffers.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0005 {d "%w- %d %m-, %Y - %T"} - For device, {m}, number of packets not sent because of a multicast storm is {I 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0005** Packets not sent. Multicast storm.
CsEvFormat/Event019d0006 {d "%w- %d %m-, %Y - %T"} - For device, {m}, the number of packets not received because of internal buffer congestion is {I 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0006** Packets not received. Internal buffer congestion.
CsEvFormat/Event019d0007 {d "%w- %d %m-, %Y - %T"} - For device, {m}, port, {I 5}, filtered and discarded a packet from MAC address {0 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0007** Filtered and discarded a packet. A port's combination filter has exceeded the filter's limits.
CsEvFormat/Event019d0008 {d "%w- %d %m-, %Y - %T"} - Debug string, {I 3} received from device, {m}: {0 5}.	**CsPCause/Prob019d0008** Debug string received from the device.
CsEvFormat/Event019d0009 {d "%w- %d %m-, %Y - %T"} - Device, {m}, has finished a loopback test or detected a loopback error. The current operational state is {T SMC_LoopBack 3}. Packets transmitted, but not received: {I 5}. Bad packets received: {I 7}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0009** A loopback test was completed, or there is a loopback error.
CsEvFormat/Event019d0013 {d "%w- %d %m-, %Y - %T"} - Device, {m}, reports the trunking protocol error, {T SMC_TrunkError 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0013** An error has occured in trunking.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0016 {d "%w- %d %m-, %Y - %T"} - Device, {m}, has rebooted, because of a Fatal Error. The error information string is {0 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0016** Device rebooted because of a fatal error.
CsEvFormat/Event019d0017 {d "%w- %d %m-, %Y - %T"} - For device, {m}, the Configuration EEPROM has failed. The device can not be rebooted, and must be returned to the factory. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0017** The Configuration EEPROM has failed. The device can not be rebooted, and must be returned to the factory.
CsEvFormat/Event019d0018 {d "%w- %d %m-, %Y - %T"} - Device, {m}, has outbound congestion, and discarded {I 3} packets. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0018** Packets discarded, because of outbound congestion.
CsEvFormat/Event019d0021 {d "%w- %d %m-, %Y - %T"} - Device, {m}, reports the number of hardware errors in received and transmitted packets exceeds the port's limit. Discarded {I 3} received packets. Discarded {I 5} transmit packets. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0021** The number of hardware errors in received and transmitted packets has exceeded the port's limit.
CsEvFormat/Event019d0200 {d "%w- %d %m-, %Y - %T"} - A FDDI port on device, {m} of type {t} has detected an attachment configuration change. The new state is {T FDDISMTCFState3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0200** PROBABLE CAUSE: The FDDI MAC physical connection has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current attachment state. 2) Check the A and B port connections. 3) Check the upstream and downstream devices.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0202 {d "%w- %d %m-, %Y - %T"} - The AC input for the first power supply on device, {m} of type {t} is {T SMC_Power 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0202** PROBABLE CAUSE: The AC input to the unit's first power supply has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current AC input state. If AC input state is bad, 2) Check first power supply unit on device. 3) Check power source to device.
CsEvFormat/Event019d0203 {d "%w- %d %m-, %Y - %T"} - The AC input for the second power supply on device, {m} of type {t} is {T SMC_Power 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0203** PROBABLE CAUSE: The AC input to the unit's second power supply has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current AC input state. If AC input is bad, 2) Check second power supply unit on device. 3) Check power source to device.
CsEvFormat/Event019d0204 {d "%w- %d %m-, %Y - %T"} - The DC output for the first power supply on device, {m} of type {t} is {T SMC_Power3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0204** PROBABLE CAUSE: The DC output of the unit's first power supply has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current DC output state. If DC output state is bad, 2) Check first power supply unit on device. 3) Check power source to device.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0205 {d "%w- %d %m-, %Y - %T"} - The DC output for the second power supply on device, {m} of type {t} is {T SMC_Power 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0205** PROBABLE CAUSE: The DC output of the unit's second power supply has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current DC output state. If DC output state is bad, 2) Check second power supply unit on device. 3) Check power source to the device.
CsEvFormat/Event019d0211 {d "%w- %d %m-, %Y - %T"} - The optical bypass for FDDI port {I 4} has become {T SMC_FddiSB 3} for device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0211** PROBABLE CAUSE: The FDDI port optical bypass has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for current optical bypass port state. 2) Check the optical bypass port.
CsEvFormat/Event019d0212 {d "%w- %d %m-, %Y - %T"} - The fuse to the optical bypass for the FDDI port {I 4} is {T SMC_FddiOBS 3} for device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0212** PROBABLE CAUSE: The state of the FDDI port optical bypass fuse has changed. RECOMMENDED ACTIONS: 1)Refer to Event log for current optical bypass fuse state.
CsEvFormat/Event019d0213 {d "%w- %d %m-, %Y - %T"} - The FDDI port's Station State for FDDI port {I 4} on device {m} of type {t} has changed to {0 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0213** PROBABLE CAUSE: The Station state of the FDDI port has changed. RECOMMENDED ACTIONS: 1) Refer to Event log for state infomation.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0214 {d "%w- %d %m-, %Y - %T"} - The actual line speed for WAN port {I 4} on device {m} of type {t} has changed to {T SMC_WanSpeed 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0214** PROBABLE CAUSE: The actual line speed of the WAN port has changed. RECOMMENDED ACTIONS: 1) Refer to the Event log for line speed information.
CsEvFormat/Event019d0216 {d "%w- %d %m-, %Y - %T"} - A module in device, {m} of type {t}, has malfunctioned, causing a Fatal Error. The error information string is: {0 3}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0216** PROBABLE CAUSE: A module has failed. RECOMMENDED ACTIONS: 1) Refer to Event log for status information. 2) Check module configuration.
CsEvFormat/Event019d0217 {d "%w- %d %m-, %Y - %T"} - A module in device, {m} of type {t}, has failed diagnostics. The diagnostic status is: {T SMC_DiagStatus 3}. Additional diagnostic code information is: {1 5}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0217** PROBABLE CAUSE: A module has failed diagnostics. RECOMMENDED ACTIONS: 1) Refer to Event log for status information. 2) Check module configuration.
CsEvFormat/Event019d0218 {d "%w- %d %m-, %Y - %T"} - Module {I 4} of type {T SMC_hwType 3}, does not match it's defined type of {T SMC_hwType 5} in device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0218** PROBABLE CAUSE: A module does not match its defined type. RECOMMENDED ACTIONS: 1) Refer to Event log for module information. 2) Check slot configuration.
CsEvFormat/Event019d0219 {d "%w- %d %m-, %Y - %T"} - A port module {I 4} of type {0 3}, does not match it's defined type of {0 5} in device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0219** PROBABLE CAUSE: A port does not match its defined type. RECOMMENDED ACTIONS: 1) Refer to Event log for port information. 2) Check module and slot configuration.

Table 4-1. ATX Switch Events and Alarms (Continued)

Message in the Event Log	Alarm View Probable Cause Message
CsEvFormat/Event019d0220 {d "%w- %d %m-, %Y - %T"} - A port on a module {1 4} of type {0 3}, has a bad port status in device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0220** PROBABLE CAUSE: A port on this module has a bad port status. RECOMMENDED ACTIONS: 1) Refer to Event log for port information. 2) Check cable connections.
CsEvFormat/Event019d0221 {d "%w- %d %m-, %Y - %T"} - A Duplicate MAC Address has been detected on FDDI ring attached to device {m} of type {t}. Trap severity is {T SMC_Severity 1}.	**CsPCause/Prob019d0221** PROBABLE CAUSE: Two or more stations with the same MAC address were detected on the network. RECOMMENDED ACTIONS: MAC address must be unique on the network. 1) Locate the offending stations and change the adaptor cards.

Index

A

Action Successful 3-3
Address
    MAC 2-4
    Network 2-8
Admin Status 3-4
Administrative Status Label 2-5
Alarm
    Messages 4-1
Apply Button 2-11
Attribute
    Selected 2-9

B

Bandwidth 3-3
Blue 2-10
Button
    Apply 2-11
    Close 2-11
    Default 2-11
    Keep Settings 2-11
    Reset 2-11

C

Config button 2-5
Conventions x

D

Default 2-11
Description 3-3
Device Configuration View
    Contact Status 3-2
    Number of Interfaces 3-2
Device Configuration view 3-1
Device Icon Panel 2-8
Device Topology View 2-5
Device Topology View Label 2-5
Device view banner 2-8
Device Views
    Chassis 2-1
    Interface 2-1
Discard Breakdown Pie Chart 2-8
Discard In Rate 2-10
Discard Out Rate 2-10
Discard Rate 2-10
DLM 1-2

E

Error In Rate 2-10
Error Out Rate 2-10
Error Rate 2-10
error rate 3-1
estimated bandwidth 2-6
Event
    Messages 4-1

F

FDDI
    Switch
        Events and Alarms 4-1
Filter 2-8

G

Gauge
    Control Panel 2-8
    Logical 2-4, 2-8
    Mode 2-9
    Type 2-10
Getting Help xi
Gray 2-10
Green 2-10

I

ICMP_App 1-2
IF Address Translation Table Label/Physical Address 2-6
IF Configuration View 2-5

IF Configuration View label 2-5
IF Status label 2-5
IF Status View 2-5
IF Status View Label 2-5
    Administrative Status 2-5
    Operational Status 2-5
ifnumber 3-2
In Errors 2-10
In No Resource 2-10
In Octets 2-10
In Packets 2-10
Index 3-3
Interface
    Description 2-8
    Number 2-4
    Percentages 2-9
Interface Adddress Translation Table 3-2
Interface Configuration View
    Admin Status 2-6
    Bandwidth 2-6
    Last Change 2-6
    Network Name/Address 2-6
    Operation Status 2-5
    Packet Size 2-6
    Physical Address 2-6
    Queue Length 2-6
Interface Configuration view 3-4
Interface Detail View 2-7
Interface Device View 2-1
Interface Index 3-2
Interface Number Label 2-5
Interface Type Label 2-5
IP Application 1-2
IP2_App 1-2

L

Last
    Change 3-4
Load 2-10
    In 2-10
    Out 2-10
Logical Gauge 2-7
Logical Interface Icon 2-4
Logical LAN Interface Icons 2-4

M

MAC
    Address
        Label 2-4
Mask
    Network 2-8
Maximum Transmission Unit 3-4
MIB-II 1-2
Mode
    Gauge 2-9
model configuration 3-2
MTU 3-4
Multi-Attribute Line Graph 2-7

N

Name
    Network 2-8
Network
    Information 2-4, 2-8
Network Information Panel Label 2-6
Network Name 3-4
Notice i

O

Operation Status 3-4
Orange 2-10
Out Errors 2-10
Out No Resource 2-10
Out Octets 2-10
Out Packets 2-10
outbound packet queue 2-6

P

Packet Breakdown Pie Charts 2-7
Packet In Rate 2-10
Packet Out Rate 2-10
Packet Rate 2-10
Packet Size 3-4
Performance View 2-7
Performance View Label 2-7
Physical Address 3-3
Port Type Label 2-4
protocol stack 3-2
Protocols
    Unknown 2-10

Q

Queue Length 3-4

R

Rates 2-9
reconfigure the device 3-3
Related Reading x, xi
Restricted Rights Notice ii
RMON 1-2

S

Selected 2-9
SNMP2_Agent 1-2
SPECTRUM
    Portable Management Application 1-3
SPMA
    Application View 1-3
    Community Names 1-4
    Front Panel Redundancy 1-3
    Generic SNMP (MIB I II) 1-4
Status
    Administrative 2-4
System UpTime value 2-6
System2_App 1-2

T

Tan 2-10
TCP/IP Based Networks xi
Terminology x
Totals 2-9
Trademarks i
traffic flow 3-1
Type 3-3

U

UDP
    Application 1-2
UDP2_App 1-2

V

Virus Disclaimer i

Y

Yellow 2-10